

Airbox GPS User Manual

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1 Introducing Airbox

You are Important

Thank you for buying one of our navigation systems. We have taken great care to make our products easy to use and include all of the information that you need. The best advertisement for our product is satisfied customers and so, if after reading this manual and viewing the tutorials on our web site, there is anything you don't understand, please do call or e-mail our office for help. You can find contact information on the back page of this manual.

Required Reading

We know that it's tedious to have to read through a manual before using your new navigation system, but it is vital to your safety that you understand the points below.

As with all GPS systems of this type, your Airbox is not a primary navigation tool. Whilst we hope it won't happen, electronic devices can fail without warning. In most countries you will still be required to carry up-to-date aviation charts with you and we would recommend that you use these for your primary navigation, however, please always check the legal requirements in any country where you fly.

Airbox is not a substitute for common sense. You should always double-check the information that you see displayed on your navigation system.

It is your responsibility to ensure that the data on the system is up to date. If you fly with out-of-date data, there is a higher likelihood of mishap.



IMPORTANT! The cockpit is not a good place to learn how to use the basics of the Airbox system. Please familiarise yourself with any function you plan to use in the air before you leave the ground.

GPS receivers work by picking up position signals beamed from satellites orbiting the earth. In order to do this, the receiver needs to be placed so that it has a direct view of the sky. It is unlikely to receive a signal inside your house away from a window, or through double-glazing, or through a screen with an in-built heating element or heat shield. The more of the sky in view of the receiver, the better it will perform. If, for example, it can only "see" a relatively small area of the sky and you then make a turn to face a different direction, the airframe may blank off the satellites that it was previously receiving and you may lose signal.

Please ensure that your placement of the unit within the cockpit does not obstruct your view and that the unit is entirely secure such that it cannot become detached whilst the aircraft is moving. There is a particular risk if the unit becomes detached that it might obstruct full and free control movement.

The GPS network is operated by the US government. Changes to the GPS network, environmental factors and radio signals may decrease the accuracy of the position displayed by the Airbox system substantially.

2 Care of your GPS unit

Looking after the unit

- We want you to have a long and happy association with your Airbox GPS, following these guidelines will help ensure a long life for the unit.
- Be very careful of the GPS screen, only clean it with a soft cloth and protect it carefully from sharp objects and the risk of being dropped. Broken screens are not covered by warranty.
- Avoid leaving the GPS in damp environments.
- Do not subject the GPS to extremes of temperature either below freezing or above 60°C.
- Do not attempt to disassemble the unit.
- Do not allow the unit to be subject to direct, bright sunlight.
- Do not cut or alter the power supply to your unit without first consulting Airbox Aerospace.

Important information about batteries

If your unit has an in-built battery, or you have purchased a battery from us, please take note of the following:

- Do not puncture the battery under any circumstance.
- You must protect the battery from physical shock and don't allow it to be hit under any circumstance.
- The battery may contain Lithium; Please dispose of it responsibly.
- Lithium batteries are light and powerful, but they must be treated correctly. Failure to follow the following advice is likely to significantly reduce the battery's capacity to hold charge. Please avoid leaving the battery on charge for more than 24 hours and leaving the battery in a fully discharged state for more than a few days.

Replacement of Airbox GPS batteries

Your Airbox GPS internal batteries, over time, will lose their ability to hold a charge. IF you find that this is the case, you can return your device to Airbox and have the internal battery replaced for a fee.

Call Airbox on +44 (0)1235 227 250 for further information and a no-commitment quote for battery replacement today.

3 The Basics

Starting the software

When the Airbox software has loaded, and once the disclaimer has been accepted, it will go directly into the map page and start trying to acquire a positional fix. You should expect a first fix within five minutes; if it takes longer, make sure that you are in an open space with no tall trees or buildings around and check that you have taken note of the required reading section of this manual.



Panning and Zooming the map

The map can be panned (moved around) by tapping in the direction you would like it to move or by pressing and dragging the map around.

Dragging the map with a finger is usually the easiest method of moving the map whilst on the ground, but in turbulence, users may find tapping to move the map a preferable method.

The map will center on wherever you tap it.



Tip: When dragging the map, we recommend using the edge of your finger or back of your nail to get the best pressure and results. Light touches of the screen are not as effective as an assertive press.



Tip: If you tap on an information box, the map will not move. Always make sure that you tap on the map itself.



IMPORTANT! Airbox principally uses resistive type touch-screens. Resistive touch-screens react to pressure and can be used with flying gloves. However, they do need to be pressed moderately firmly. If you find that the screen is jumping or not performing as expected, then it is probable that you are using insufficient pressure

Getting the map to follow the aircraft



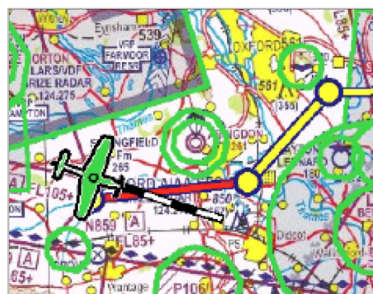
Once you move the map away from the aircraft, it will no longer follow the aircraft position; in order to get the map to follow the aircraft again, you need to tap on the 'track aircraft' button pictured above. When the system is following the aircraft, the 'track aircraft' button will always be highlighted in blue.

You can magnify or reduce the size of the map by pressing the "+" and "-" buttons located at the bottom of the map.



Tip: The fastest way to move large distances on the map is to zoom out, move the map and then zoom back in.

Active and inactive legs



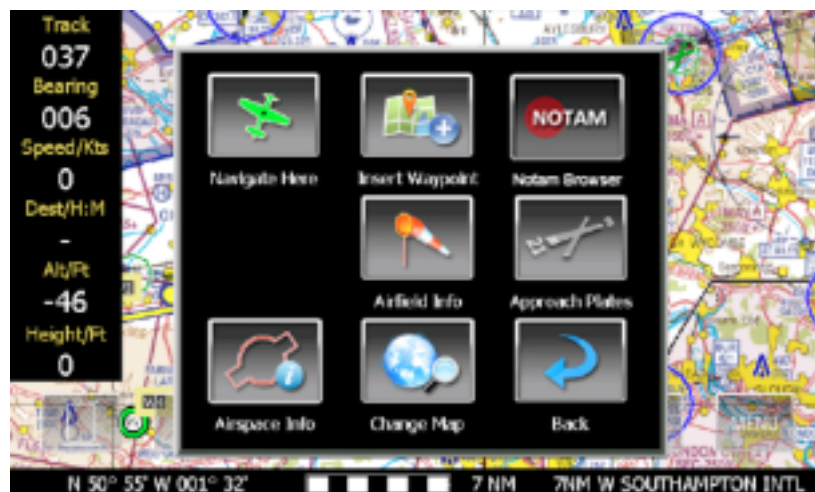
IMPORTANT! When you fly a route with multiple legs in it, one of them will be the active leg. This is the leg to which all of the flight information such as bearing, distance and time relates. It is also the leg into which new waypoints will be placed when you add them.

You can tell which leg is active because it will be red, whereas inactive legs are yellow. You can change which leg is active using the WP+ and WP- buttons at the bottom of the screen.

The In-map context menu

When on the map screen, you can tap it to move it around, alternatively you can press and hold your finger for a few seconds over any point on the map; A context menu will appear which gives you further options, such as inserting a new waypoint or finding out more information on airspace at that point. All of these functions will be further elaborated in the rest of the manual.

Here is a list of all of the options that can appear in this menu. Some of them will only be visible if they are active at the place where you have pressed e.g. the airfield information button will only appear if you press on an airfield.



- Navigate Here
- Insert Waypoint
- Create User Waypoint
- Delete Waypoint
- NOTAM info
- Airspace Info
- Airport Info
- Change Map Series
- Back to Map

Changing Chart Series

If you have multiple chart series installed, you can switch charts by pressing and holding your finger anywhere on the chart and then selecting '**Change Map**' from the navigation menu.

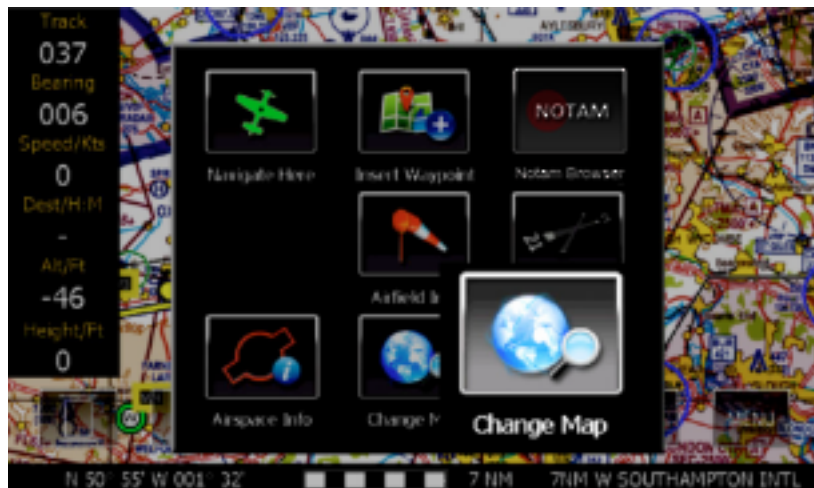


Figure a Press and hold to reveal context menu

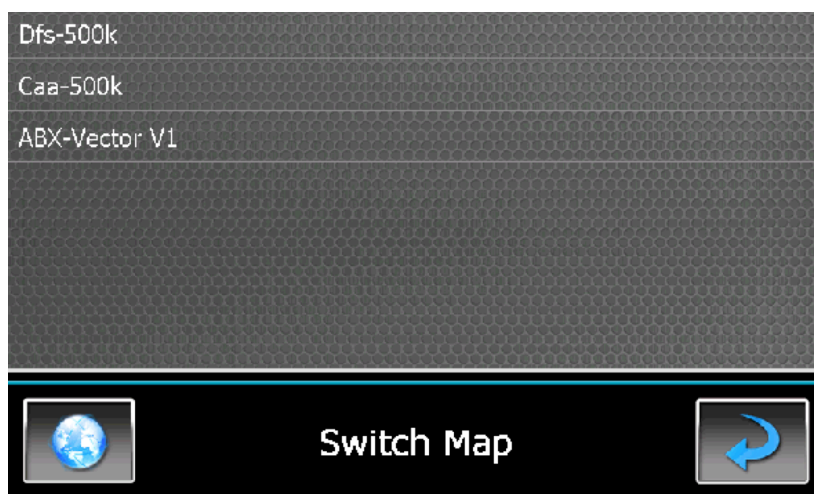


Figure b Press on the chart set you want to use

4 Planning your first route

Besides using Fastplan PC Flightplanning software to plan your flights (go to <http://www.airspaceaware.com/wp-content/uploads/2010/12/Fastplan.pdf> to download the latest manual) there are two main methods of inputting a flight plan directly into your Airbox device:

4.1 On the map

The first way is simply to find your destination on the map (see panning and zooming) and then press and hold your finger over it. A menu will then appear and you should select '**Navigate Here**' to make it your destination. With practice you will find that this is invariably the quickest way to plan short routes where the destination airfield's map position is known.



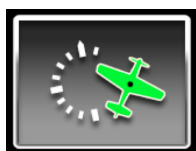
*Tip: If you have multiple chart series installed, you may wish to change to a different chart for planning, to change chart, simply press and hold your finger anywhere on the map and then select '**Change Map**' from the pop-up menu.*

*Tip: If you wish to navigate from a location other than your current location, first clear the route, then press and hold your finger on the start point, selecting '**Insert Waypoint**' from the popup menu. Next select your destination and press 'insert waypoint' here also. You can now put in the intermediate waypoints.*

4.2 Using the Plan Flight menu



The second way to select a destination is through the Plan Flight menu. To get there from the map, press the '**MENU**' button and then the Plan Flight button, which is in the top-left of the screen. You will now have an option to navigate either from your current position '**From Current**' or between two separate places '**Between Places**'.



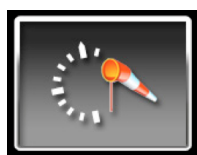
From Current



Between Places



Tip: If the unit doesn't currently have a GPS fix, it will use the last known position., which will be indicated on the map by a grey aircraft with an 'X' in the middle of it.



Airfield



User Waypoint



Navaid



Postcode



Coordinates

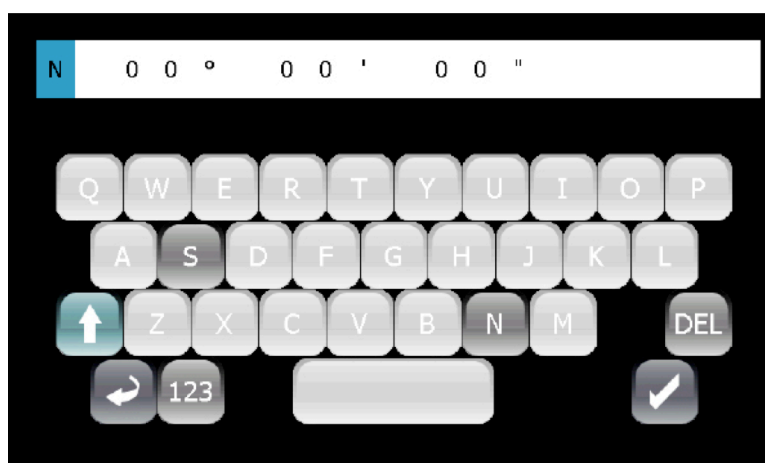
Once you have made this selection, you will be presented either with a start point or a destination choice. You can now select the type of start/destination eg From an airfield, set of co-ordinates, user waypoint etc.



Tip: Some search options are available only if you have optional packs installed. E.g. UK postcodes are only available with the Helipack.



When you have selected the destination type, you will be prompted to type in your destination using the virtual keyboard. For airfields you can type in either the ICAO designator or the name of the airfield itself. If you make a mistake and want to restart, just press the DEL button on the right hand side of the screen.



If you selected to navigate by co-ordinates, then you can fill in the co-ordinates using the keyboard.



IMPORTANT: Please be careful when entering co-ordinates. There are three formats in common use in aviation. The Airbox will take any of these formats, but you will have to select the one you want to use from the Preferences menu.

Once you have selected your destination, you will be asked if you would like to insert an Intermediate Waypoint. Select 'Yes' if you want to insert an intermediate waypoint (a waypoint in between your start point and end destination) that is a defined place, such as an airport or a user waypoint.

Select 'No' if you want to add your intermediate waypoints on the map or just wish to travel from your start position to a single destination. To start your flight and end your flight from the same position eg Your home airfield, simply make your end destination the same as your start position and add an intermediate waypoint when prompted.

Once you have finished with the airfield selector you will be returned to the map automatically.

Inserting new waypoints into the route



Once you have selected a destination, Airbox will draw a straight line between your current location and the destination (unless you have selected to start from an alternative destination). You can now pan (move) the map around to oversee the route. If you wish to insert a new waypoint via the mapscreen, for example to avoid restricted airspace, you can press and hold on the map where you want to insert the point and then when the context menu appears, select 'Insert Waypoint'.

Please note that any new waypoints that you insert into the route will be added to the active leg of the route (the section of the route that appears red not yellow).

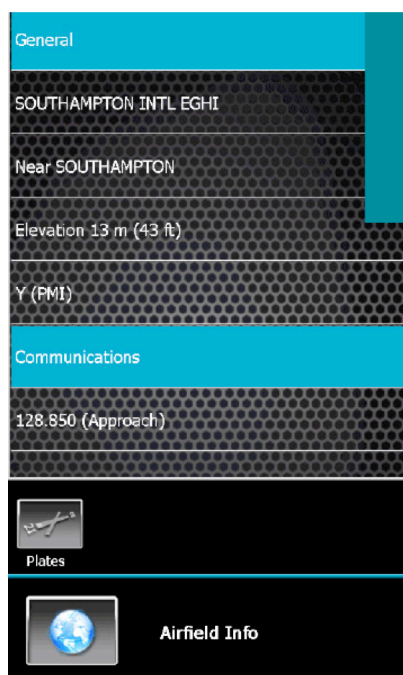
Once you have finished putting in new waypoints, you can press and hold your finger anywhere on the map and press the 'Select first leg' button from the pop-up menu to activate the first leg ready for flight.



Tip: When you insert a new waypoint in the route, the system will automatically activate the next leg.

Thus it makes sense to plan your route from the start point to the destination, that way your unit will automatically activate the legs in the right sequence for you to plan your route quickly

Finding and viewing information on airfields



You may wish to check information on airfields such as frequencies and runway length. There are two ways to do this - First you can find the airfield on the map, press and hold over it and select **'Airfield Info'** from the context menu which appears.

Alternatively, you can search airfields by selecting **'Search'** from the Home menu and then input the name or ICAO code of the airfield. This will display all currently held data on that airfield (if any) and any available airfield approach plates (if any).

Finding and viewing airfield diagrams and approach plates

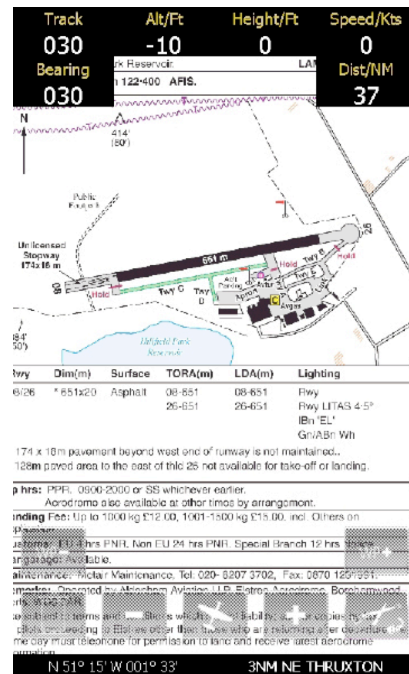


If you have airfield (including Flight Guide) and approach plates installed (which may be optional depending on your area of coverage), you can view them on your device. You can check what charts are available on our website at <http://www.airboxaero.com>

To access the charts, press and hold your finger over an airfield; when the pop-up menu appears, simply select **'Approach Plates'**. You will now have the option to view any of the approach charts for the airfield. If there is only one approach chart for the airfield, pressing the button will take you immediately to the plate, otherwise

you will be given an option to select which approach plate/airfield diagram you require.

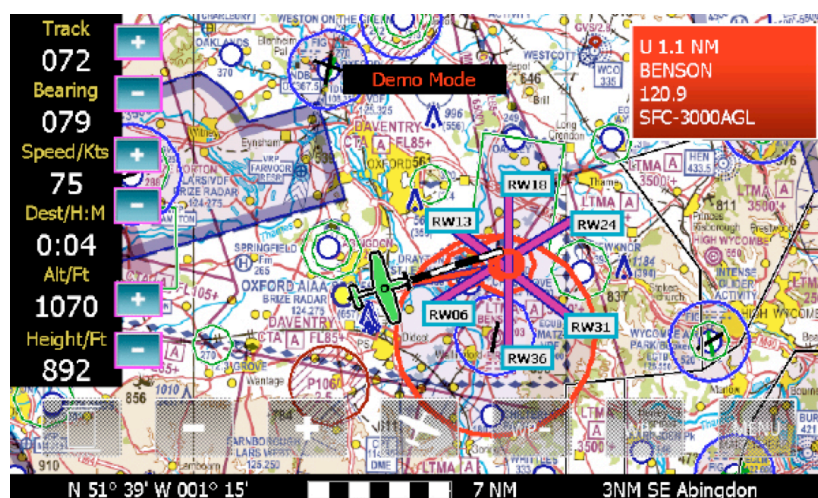
To exit the approach chart, simply press on the button in the bottom-right of the screen.



IMPORTANT! Whilst Airbox take care with the referencing of approach charts and airfield plates, we cannot guarantee in any way the accuracy of these plates.

AIRFIELD INFORMATION CHANGES PERIODICALLY; THE INFORMATION GIVEN BY YOUR AIRBOX IS FOR GUIDANCE ONLY. ALWAYS DOUBLE CHECK THE INFORMATION THAT YOU SEE.

Practicing with Airbox before you go flying



Before actually flying with Airbox, you should practice using its features. You can do this very simply by activating 'Demo' mode in the Plan Flight menu.

Once activated, you will be able to use the  and  symbols next to the information boxes on the map screen to control the aircraft and fly it around. The system will then react as if you were actually flying giving you the same warnings and information.



IMPORTANT! We highly recommend that you practice flying with your Airbox system before you actually take it in the air; This is by far the best way to familiarise yourself with the device features.

Saving your route for later



Once you've planned a route, you can save it for retrieval later. From the map, press the 'MENU' button, then the 'View Route' button.

You can now select to save the route and if you wish you can also make it a favourite route (which makes it easier to find if you have a lot of routes saved).

To name the route, press on 'NEW ROUTE'. The virtual keyboard will allow you to enter a route name. Click the 'Tick' to confirm the route name then click 'Select' to complete the process.

NOTAM Viewer



When you sync your GPS device with Fastplan and provided your PC has access to the Internet, valid up-to-date NOTAMs are uploaded onto your device. The display of NOTAMs can be set-up in 'NOTAM Preferences' which is found in the 'Preferences' section of the software.

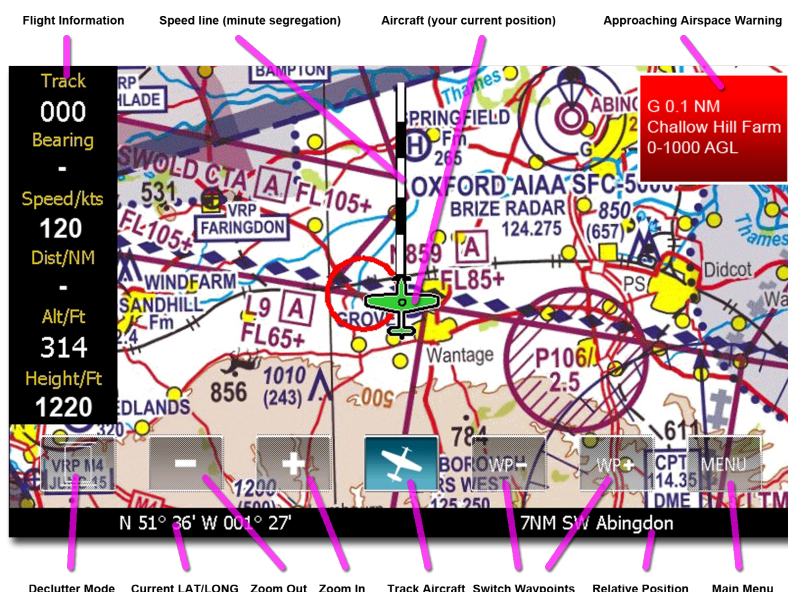
To view a NOTAM at a particular location eg a destination airfield, press and hold on that location until the context menu appears then press the NOTAM button.

5 Flying with Airbox For the First Time

Ensuring that you have been located by the GPS

Your Airbox unit requires a valid GPS signal in order to know where you are. If it doesn't have a valid signal then the system will display the warning "NO GPS" in red at the top of the screen. Provided you have placed the GPS in a suitable location, it will acquire a satellite fix in around two minutes, however, please be aware that under certain circumstances, GPS receivers can take up to ten minutes to acquire a fix (often when the device is first used as it needs to work out, from scratch, its global position). If you are having trouble acquiring a satellite signal or need advice on positioning your receiver, please read the 'Required Reading' section at the front of this manual or contact the Airbox offices.

Basic information display



The basic information display will, by default, be laid out as you see in the previous diagram (although the buttons on your Airbox unit will be semi-transparent). Flight information is situated to the left of the screen and buttons along the bottom of the screen.



Tip: You can change the information displayed in the route information box on the left of the screen. To do this, simply tap your finger on the box and the system will scroll through: time to destination, time to next waypoint, total distance and distance to next waypoint.

Reaching waypoints and following the route

Once you are en-route, your Airbox unit will give you information such as your current track and the bearing of the next waypoint. Once you reach the waypoint, the system will automatically switch to the next leg of the route. All of the information displayed relates to the current active leg of the route (an explanation of active legs is contained in the chapter entitled 'basics')

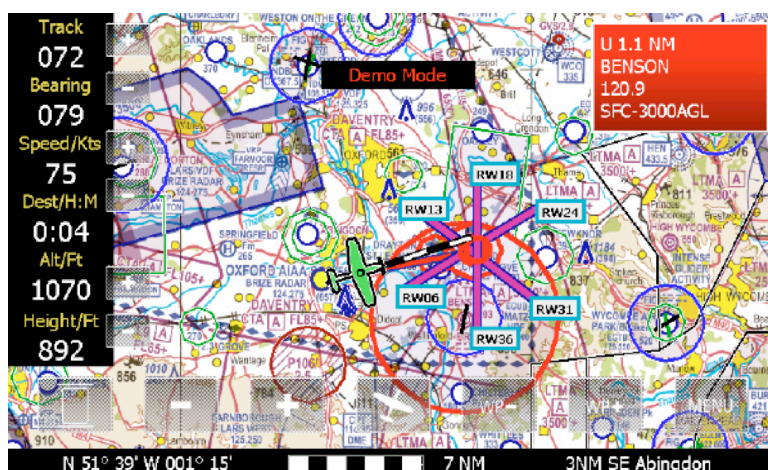


Tip: If you miss a waypoint because you have made a detour, you can manually switch to the next waypoint by using the WP+ button at the bottom of the screen.

How Airbox displays and warns of controlled airspace

One of the primary functions of Airbox is to give you, the pilot, awareness of controlled airspace. The system will warn you intelligently of airspace restricted at your current height.

Airspace which is restricted at your current height will show with clearly defined outline on the map.



IMPORTANT! Airbox will continue to warn you of restricted airspace +/- 500ft on your current height to give you a safety margin against climbing or descending into a restricted zone.



IMPORTANT! You must activate the airspace warning before the system will warn you of restricted airspace. You can do this through the Preferences menu (see the 'Preferences' section of the manual). All classes of airspace warnings will be on by default when the system is delivered to you.

As you approach the airspace, the outline will change to red and red and white flashing box will appear to the top right of the screen with text indicating the class, levels of restriction and name of the airspace. If we have a frequency for the airspace controller then that will also be displayed, if not then you can read it straight from the map in the usual way.



Tip: The system will outline in red any airspace that is controlled or restricted within five or ten minutes

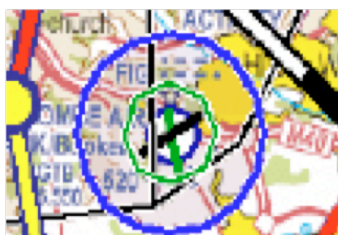
(depending on what you have selected) of your current projected track. Please note that the information box will only display information for the next piece of controlled or restricted airspace.



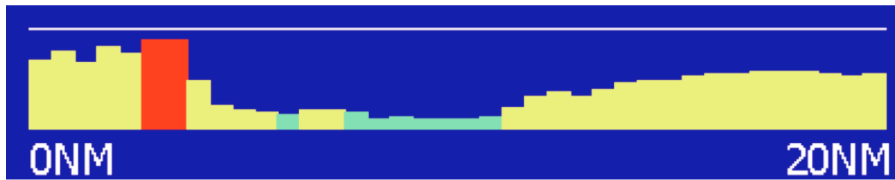
If you would like more information on a particular piece of airspace, press and hold your finger over it. After a few seconds a menu will appear and you should select 'Airspace Info' which will then show you all of the airspace controlled at any level at that particular point.

How to get more information on an airfield

There are two main ways to find information on a particular airfield (see the previous chapter called Finding and Viewing Information on Airfields) but the easiest one to use in the air is to press and hold your finger on the airfield and select 'Airfield Info'. You can then access frequency and runway information and also the flight guide pages (where installed).



Terrain Warning



Your Airbox system can display the terrain ahead in order to warn you of high ground. This option can be turned on and off in the 'Display' section of the 'Preferences' menu of the system. When activated, you will see a bar across the top of your Airbox screen with a profile of the ground set against your current height. You can also turn on the option to have an information box permanently on-screen with your current height above the ground.

The colours used in the profile:

Red indicates an aircraft height of less than 100ft above the terrain

Yellow indicates an aircraft height of between 100ft and 500ft above the terrain

Green indicates an aircraft height of between 500ft and 1000ft above the terrain

Brown indicates an aircraft height of more than 1000ft above the terrain



IMPORTANT! Whilst we have made the terrain warning feature as accurate as we can within the limits of processing power and memory available, it in no way should be relied on either for terrain avoidance or for compliance with low-flying regulations. Please always remember that Airbox is a VFR only system.

6 Other Functions

Nearest Airfields



From time to time a pilot may wish to navigate to the nearest available airfield when in flight. To do this he or she should press Menu then the Nearest Airfields button. The device will then search through its databases and list all closest airfields by name and ICAO identifier, displaying them in order of proximity. Other information can be displayed on the screen if available such as bearing relative to current position, runways and lengths, frequencies and the distance in NM.

To create a route to any of these listed airfields, simply press on the required airfield and confirm your selection when prompted.

Viewing Route Waypoint Lists



You can view a list of current route waypoints together with basic details such as bearings and distances. To access this screen, enter the home menu, then select **'View Route'**.

Name	Dist. (NM)	BRN	(NM)
N 51° 34' W 001° 34'	0.00	000	20.92
N 51° 36' W 001° 25'	5.80	072	15.11
N 51° 42' W 001° 14'	9.06	048	6.05
PEKOX	6.05	013	0.00

 Load  Save  Clear Route  Reverse

 View Route 

If you would like to insert a new waypoint to your current route on the **'View Route'** page, you can do so by pressing and holding your finger over the waypoint in the list below where you want to add the new waypoint.

After two seconds, you will be presented with a menu, from which you can select the option to insert a further waypoint.

From there, follow the on-screen instructions.

If you would like to delete a waypoint from the route, you can press over the waypoint in the list and then select **'Delete'** from the menu, which pops up.

You can also use the pop-up menu to move waypoints up and down the waypoint list.

Loading, Saving and Clearing Routes



You can load a route from the 'Plan Flight' menu, which itself is accessed through the 'Main Menu'. When you see the route you want, select it and then press load. The route is now in the system and you can press the map button to return you to the map.

You can save a route through the waypoint list (see above), simply select 'Save' from the options below the route and you will then have the option to name the route and make it a favourite if you wish.

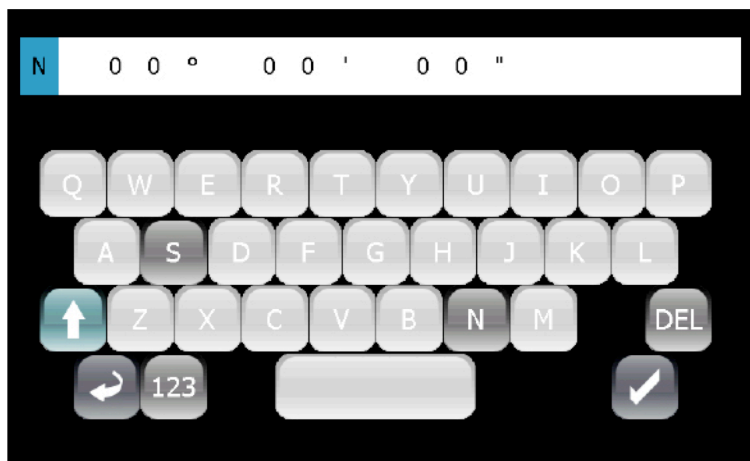
If you wish to clear a route, you can do so from the navigate menu, simply select 'Clear Route' and then confirm when prompted.

Switching the direction of a route



You can select to reverse a route, which you might want to do if, for example, returning to your start location and wishing to fly the same route back. This is easily done through the waypoint list (see above).

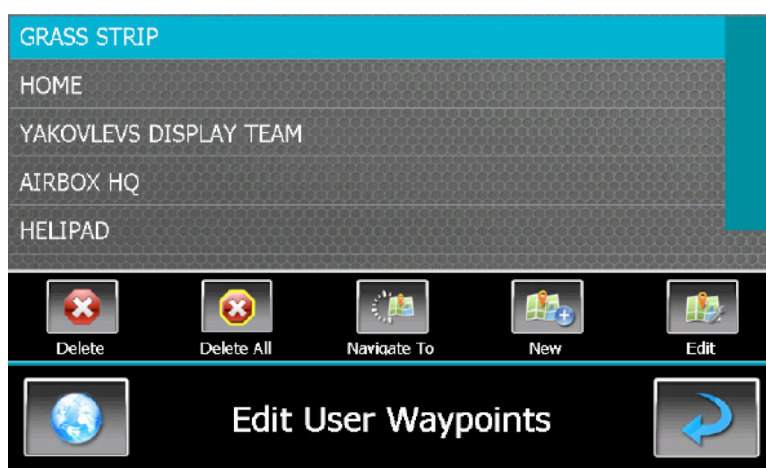
User-Defined Waypoints



The Airbox system allows you to navigate via a User-Defined Waypoint (UDW). You can create new UDWs by pressing and holding your finger on the map where you want to put the waypoint. When the context menu appears, you should select 'Create User'.

You will now have the option to change the exact location of the waypoint and also give it a name, altitude and frequency. To enter data into the boxes, press your finger on them and the virtual keyboard will appear allowing you to make changes:

Editing Existing User-Defined Waypoints



You can edit user-defined waypoints through the 'pilot info' page of the menu. When in the 'pilot info' page,

you will see a list of your waypoints, together with a button to add a new waypoint and a button to delete all waypoints.

Flight log



Name	Date
N 51° 36' W 001° 27' - N 51° 36' W 001°	01/01/09
N 51° 36' W 001° 27' - N 51° 36' W 001°	24/02/11
N 51° 36' W 001° 27' - N 51° 35' W 001°	24/02/11
N 51° 36' W 001° 27' - N 51° 36' W 001°	24/02/11

 Delete
 Delete All
 View


Flight Logs


Your Airbox unit will automatically keep a record of your flight, starting logging when you reach 25Kts if you have selected the aeroplane symbol, 10Kts if you have selected the microlight and 5kts for a helicopter. It will record your point of take-off, point of landing, the date, the time, the duration of the flight and the distance flown.

The point of Takeoff will always have a **'T'** next to it and the point of Landing has an **'L'**.

You can access the flight log through the **'Pilot Info'** menu page, which itself is accessible from the **'Main Menu'** page.

You can select and delete individual logs on the Flight Logs page by pressing the log to be deleted and pressing **'Delete'**. Pressing **'Delete All'** will erase all flight logs saved on the device.



Delete



Delete All

All your flight logs will be backed up to your copy of Fastplan when you do a device sync from where they can be viewed and edited.

7 Understanding the Preference menus



There are six 'Preference' menus in Airbox, all accessed through the 'Preferences' button in the Main Menu. The purpose of this section is to take you through what the options do and how to use them.

7.1 System Preferences



Setting up the GPS

You will see two drop down boxes to select which port is being used for the GPS data, what speed it's coming in at and also whether the software needs to correct for the Earth's irregular geoid shape.

If your system appears to be working correctly, please don't interfere with these settings, as changing any of them could either stop the GPS from working or cause it to display false data.

You can check to see what the correct settings should be in the product support section of our web site.

On this page you are also given information about the GPS such as how many satellites it is receiving and other unprocessed data.



IMPORTANT! These boxes are not for experimentation, if you are not fully aware of the consequences of changing these settings, please don't change them.

Correct settings for the Foresight 2.0/SuperBright: Com7, Baud 9600, Geoid correction Off.

Correct settings for the Clarity 2.0: Com1, Baud 9600, Geoid correction Off.

Correcting for the irregular shape of the planet

The Geoid correction tick box alters whether the GPS corrects for the irregular shape of the planet. Essentially, because the earth is not quite spherical, in order to get accurate altitude and height data you need to have a good model of what height the sea level is at any particular point. That's what this tick box refers to.

Because some GPS receivers have this correction already built in and some don't, you may or may not need this option. If you purchased a system direct from Airbox it will already be set up correctly, in which case, please do not change it. If you have changed it by accident and are not sure what setting your device should be set to then please call us for the correct setting.

Flight logging

Turning on this feature means that the system will not only record your start point and destination, but also points along the route. The interval between the points (in seconds) will be determined by the time interval that you select here.

If the aeroplane is selected as the aircraft symbol (see Display preferences), then the system will start logging when the a/c is travelling faster than 25kts across the ground and will stop 5 minutes after the speed drops below 25kts.

If the helicopter is selected as the aircraft symbol (see Display preferences), then the system will start logging when the a/c is travelling faster than 5kts across the ground and will stop 20 minutes after the speed drops below 5kts.

7.2 Airspace Preferences



In this option menu you will be able to turn on and off the airspace warnings. If you highlight an airspace in blue (press on the airspace class to toggle the selection on and off) then you are enabling the warnings for that particular class of airspace as you approach it.



Tip: We recommend that our users keep all of these options turned on for maximum airspace awareness.

7.3 NOTAM Preferences



Here the user can set up his or her NOTAM preferences deciding whether to filter by size, date, relevance or simply whether they are displayed on the map screen or not. NOTAMs are updated and transferred to your device when synced with a copy of Fastplan that has access to the Internet.



Tip: For the most effective display of NOTAMs, sync your Fastplan software with your GPS device just prior to flight.

7.4 Display Preferences



Show User Waypoints

Toggle on/off to display User Waypoints on the map screen

Map Orientation

Toggle between North Up or Track Up mode.

In North Up mode, the map will always be oriented with north at the top of the map. In Track Up mode, the map will rotate about the aircraft.

Please note that if you are using a standard aviation chart on your Airbox, the text on the chart will rotate with the chart and not with the movement of the aircraft.

Screen Orientation

Toggle between Portrait or Landscape display (requires restart of device to activate between display types)

Show Runway Centrelines

Toggles between displaying airfield runway centerlines on the map (shown in purple).

Show Route Data

Toggles on/off the display of Time/Distance to Destination/Next Waypoint



Tip: Users can cycle between Distance to destination, Time to Destination, Distance to Next Waypoint and Time to Next Waypoint by pressing the Route Data information on the map screen.

Show Altitude

Toggles on/off Altitude display on mapscreen.

Please be aware that vertical altitude on GPS is only specified accurate to 60 feet with a perfect signal. Also, if the geoid is not correctly set (see 'System Preferences'), then the displayed altitude will lose all meaningful accuracy.

Show Current Position

Toggles on/off Long, Lat position on mapscreen

Show Scale

Toggles on/off the map scale on the map screen

Show EFIS Arc

Toggles on/off an EFIS compass arc around the aircraft

Show Nav aids

Toggles on/off the display of Nav aids on the map screen

Remember Last Chart

Toggles on/off the ability for the device to remember the users last displayed chart type eg 250k charts

Suppress Confirmations

Toggles on/off the confirmation boxes that appear when a user inputs data eg Select Destination, Are you sure? Y/N

Rubber Band

Allows user to display a "virtual rubber band" track to his or her next waypoint or destination.

Drag Panning Enabled

Toggles on/off the ability to drag pan the map around. In off mode the user can only tap the screen to move it around.

Show Runways

Displays a runway icon over airfields giving an indication of layout and runway type.

Green runway represents a grass runway

Black runway represents a tarmac runway

Grey runway represents a concrete runway

Blue runway represents a runway of unknown type

Snap To Distance

Allows the user to toggle the distances at which finger press on the map screen will snap to an airfield, NavAids or User Waypoint.

Speed Vector



Toggles on/off the speed vector line projected from the aircraft icon when an aircraft is in flight.

Terrain Profile

Toggles on/off or Auto feature providing a Terrain Ahead profile view.

The terrain ahead warning has three settings, one of which is “on”, which overlays onto the map a profile of the terrain ahead, the other setting is to set this option to “Automatic”, which will only turn on the terrain map when there is terrain ahead within 1000 vertical feet of current altitude.



IMPORTANT! The height and terrain features give approximate information to help you make general decisions about your flight, they should not be relied on in any circumstance where such reliance might cause risk to life or property or where such reliance might lead to the possibility of contravention of the law

Show Weather

Toggles on/off the weather feature on the device (NOT CURRENTLY ACTIVE)

Relative Position

You have the option to overlay distance and bearing either to the nearest airfield or town. The system will display the name, bearing and distance of the nearest airfield or town. This is very useful when giving your position to air traffic controllers.

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Height Above Terrain

Turning on the ‘Height’ box will display your current approximate height on the map in the box marked “HAT”.

Show Route

Toggles on/off the display of a route on the map screen

Show Airfields on Map

Toggles on/off the display of airfields on the map.

Ground Speed

This option will overlay a box showing your current groundspeed onto the map. GPS derived data will give you your groundspeed as opposed to airspeed. Units for groundspeed can be chosen in the ‘Unit’ preferences menu.



Tip: Looking at the difference between your groundspeed and airspeed can help you to determine wind speed and direction.

Bearing Data Display

These options boxes, when ticked, will put information boxes onto the map to show current ground track and bearing to next waypoint and destination.

Distance Rings

Turning on this option will add rings around your aircraft at a set distance. Some users find these useful as an aid to positional reporting.

Aircraft Symbol

Allows selection of the symbol used for the aircraft on the map. You can select from helicopter, aeroplane, small aeroplane or triangle. Please note that selecting a different aircraft will change the flight logging interval and rules (please see the Flight Logging section for more detail).

Track Data Display

Toggles on/off your aircraft Track information in flight.

7.5 Units Preferences



This preference menu allows you to set units for the four main measurements: Altitude, Co-ordinates, Speed and Distance.

Note: Co-ordinate Format

Airbox allows you to enter co-ordinates in any of the commonly used formats.

These are:

Decimal Degrees

Degrees, Decimal Minutes

Degrees, Minutes, Seconds

Ordnance Survey Grid

ICAO Flight Plan

Most popular aviation guide-books use the second of these options, but please be sure to have the correct format selected for the type of co-ordinates that you plan to enter

7.6 Home Preferences



This preference allows the user to set up his or her home airfield, either as an Airfield, Navaid, User Waypoint or Co-ordinates. Once set up, the pilot can then quickly create a route to their Home location by pressing Main Menu > Plan Flight > Home. A direct line from the users current location to their designated Home location will then be created, overwriting any existing planned routes.